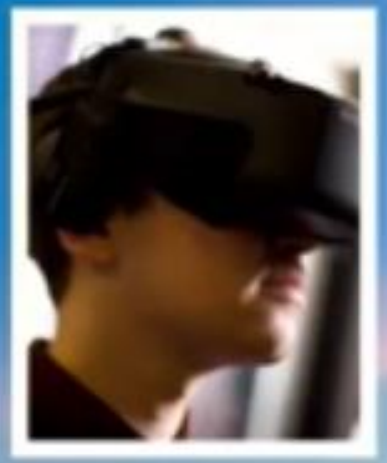
ELT it is a-changing

Evan Frendo
www.e4b.de

IATEFL Online

Join the live coverage from the conference
for English language teaching professionals



Friday 5 April 2019, 13.05 - 14.15 UK time

Future directions in ELT: where are we headed? (Interactive)

Katherine Bilsborough, Evan Frendo, Amol Padwad and Mercedes Viola

www.teachingenglish.org.uk/events/IATEFL-Online/2019

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BRITISH COUNCIL

Service encounters

- Retail, finance, healthcare, government, tourism, education and research

- “Pepper can speak up to 15 languages and provide translation via Cloud services”

Teaching assistant

- Information
- Routine tasks
- Testing
- Patient?

Technical communication

- Routine
- Non-routine
- Specialized language (with non-standard grammar)

Challenge Number One

The world of work is changing – routine communication tasks are being taken over by machines

What has shipping got to do with teaching English?

- Currently around 50,000 vessels at sea
- Over one million seafarers
- Main communication at sea is English

You see where I am going with this?

Challenge Number Two

Specific industries are seeing a reduced requirement for English training

Spoken communication

- Lingua franca
- Getting the job done

日本語での仕事（授業なし）
Auto-Translate
Work in fluent Japanese (without any lessons)

Lang. Teach. (2018), **51.4**, 541–552 © Cambridge University Press 2018
doi:10.1017/S0261444818000253

First Person Singular

Technological disruption in foreign language teaching: The rise of simultaneous machine translation

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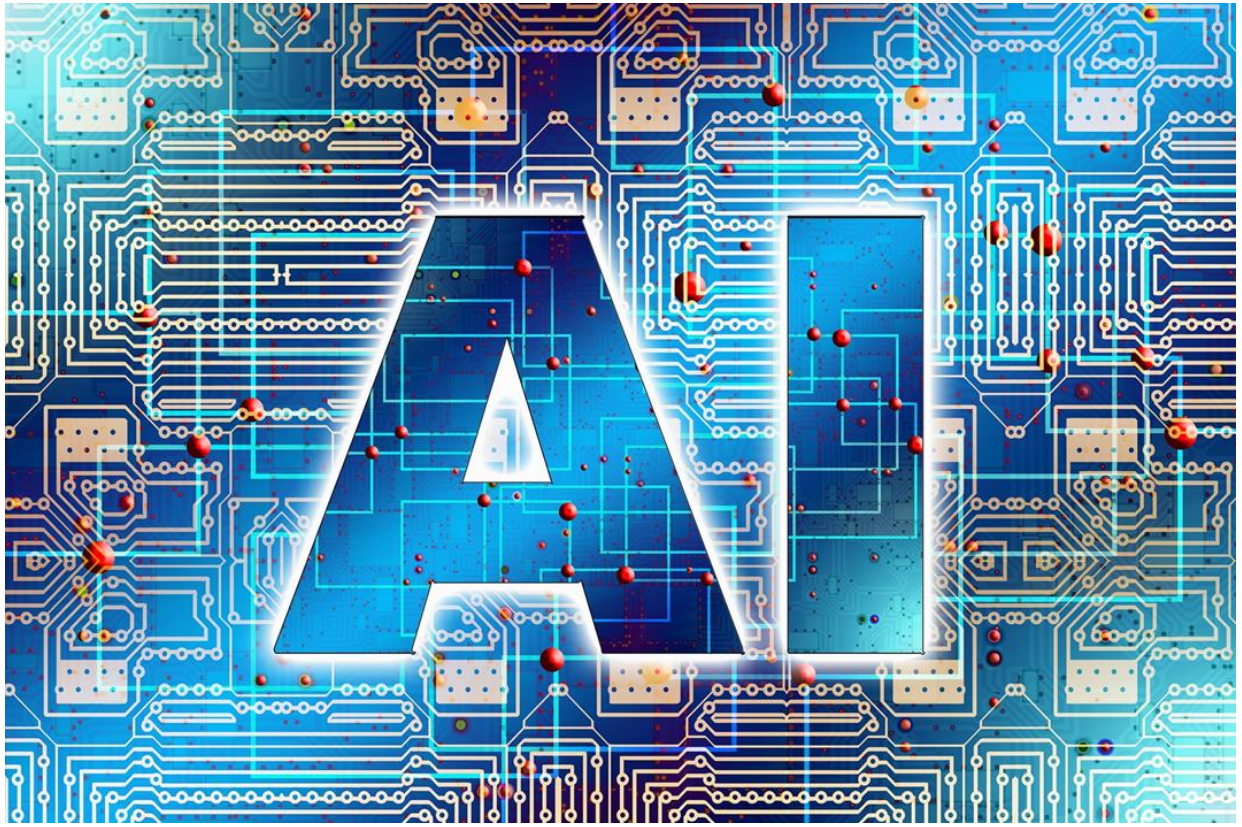
Introduction

The fear of technology replacing jobs can be traced back to Aristotle, who, before great technological advances existed, ventured that machines may one day end the need for human labor (Campa 2014). In the current era, there is overwhelming evidence of technological unemployment. This evidence comes in the form of jobs that were once common, but have largely been replaced by technology such as switchboard operators, travel agents, booth

Challenge Number Three

People may be willing to use translation devices in future, rather than spend several years learning a language

What is artificial intelligence?



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- Narrow (weak) intelligence

(e.g. chess computer, self-driving car, search engines, email spam filter, translation)

- General (strong) intelligence (human-level intelligence)

- Super intelligence

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Learning without being explicitly programmed

Supervised learning

Training data - labels

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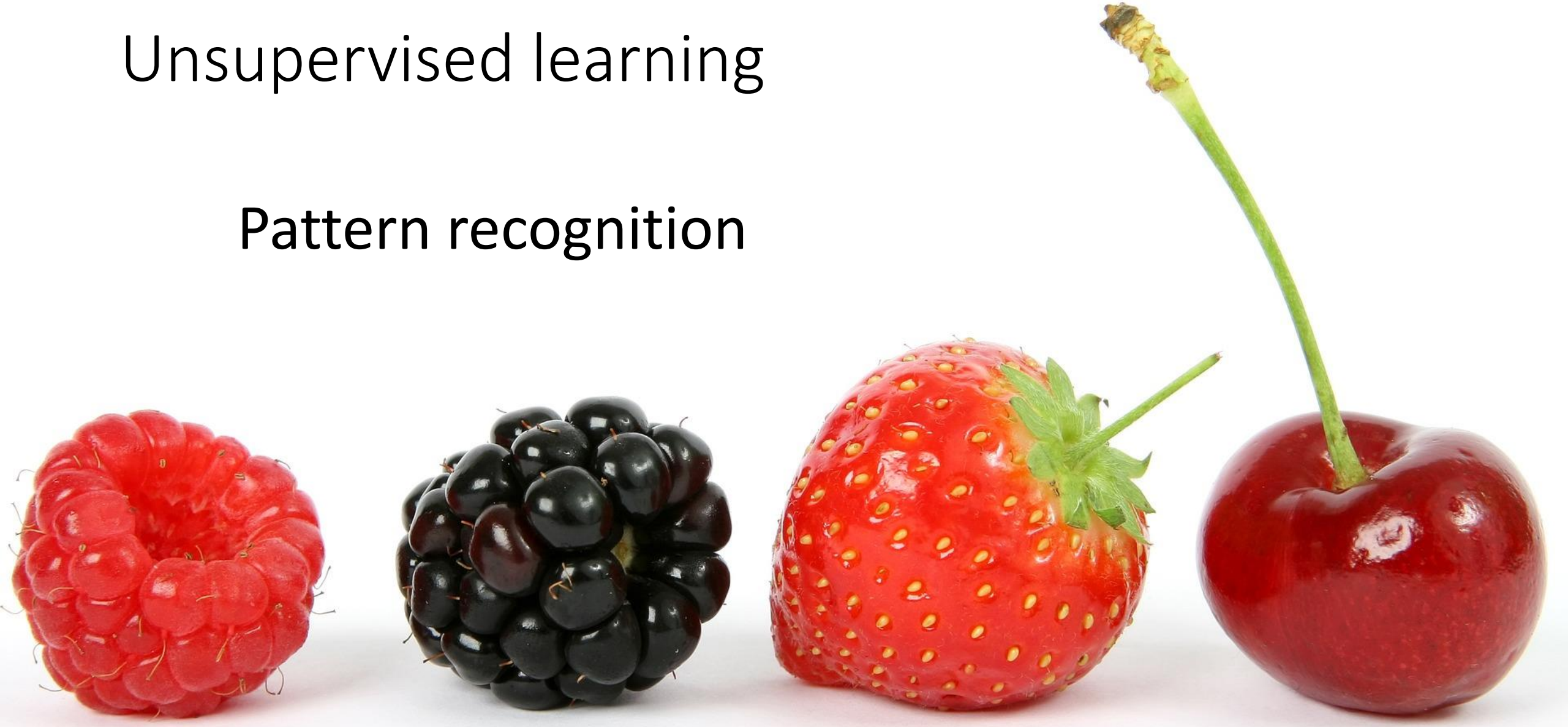
Unsupervised learning

Pattern recognition



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Huskies and wolves

https://pixabay.com/photos/husky-dog-dog-breed-animal-3380548/

https://pixabay.com/photos/wolf-predator-hunter-canis-lupus-635063/

CV matching

BUSINESS NEWS OCTOBER 10, 2018 / 4:12 AM / 9 MONTHS AGO

Amazon scraps secret AI recruiting tool that showed bias against women

https://www.reuters.com/article/us-amazon-com-jobs-automation-insight/amazon-scraps-secret-ai-recruiting-tool-that-showed-bias-against-women-idUSKCN1MK08G

Aeroplanes – you need three things to fly them!

The pilot is there to feed the dog.

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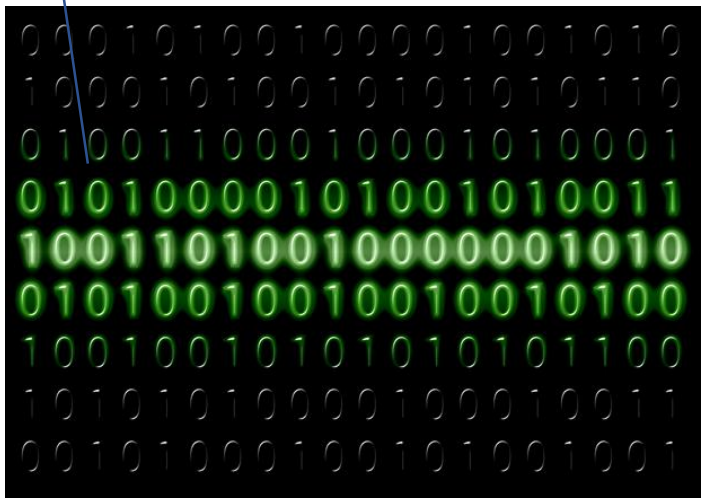
The computer is there to fly the plane.



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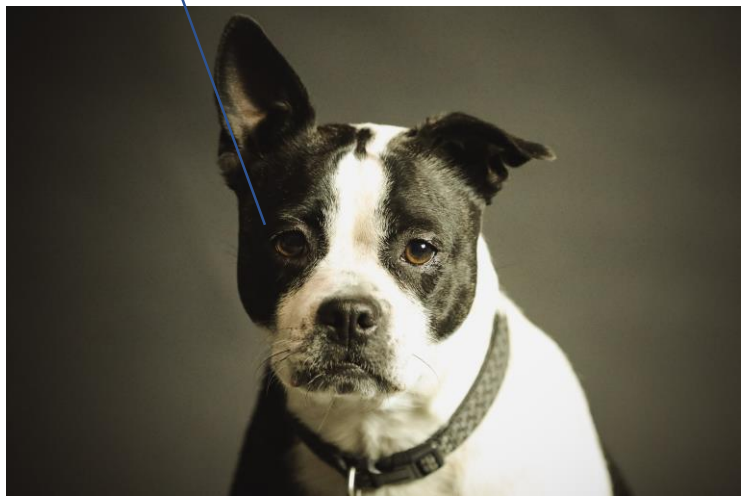
The dog is there to bite the pilot if he tries to touch the computer.



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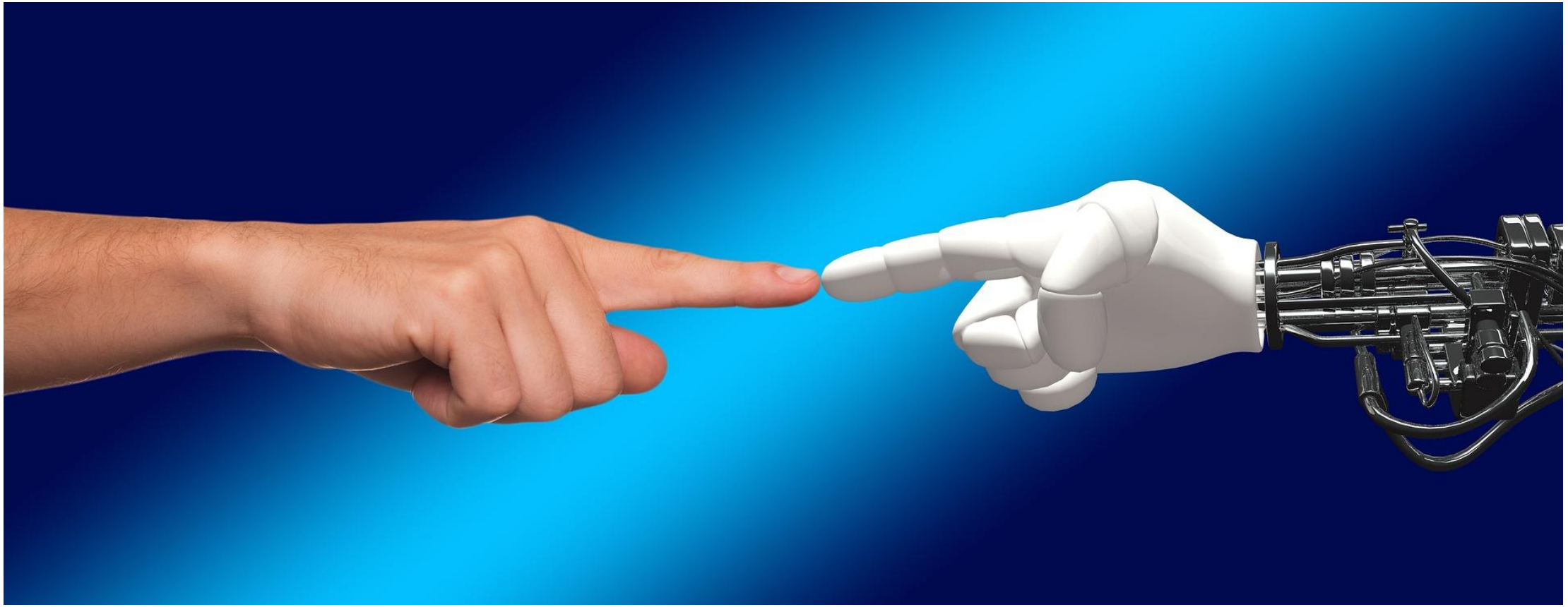
What is natural language processing?



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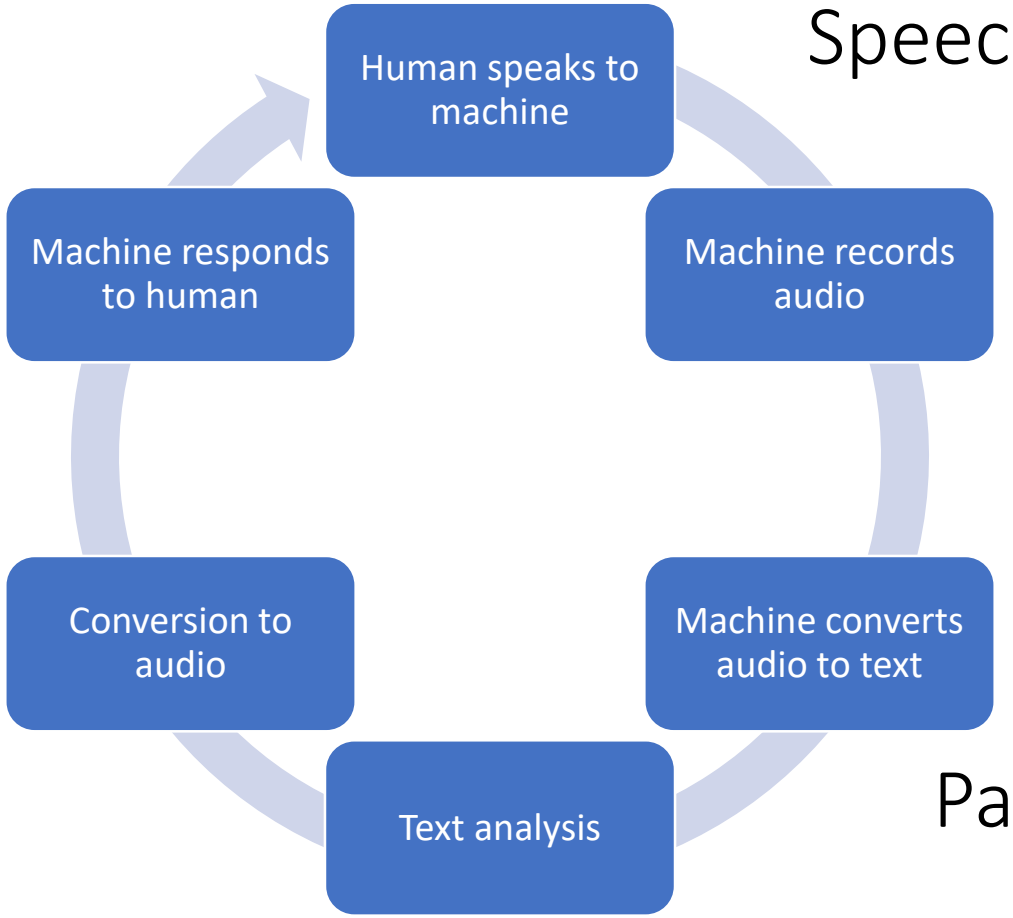
NLP – interactions between computers and humans



Speech recognition

Part-of-speech tagging

Machine translation

Parsing

Semantic analysis

Sentiment analysis

How are people learning languages?

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Online learning

https://pixabay.com/photos/training-course-3207841/

Virtual reality and augmented reality

https://unsplash.com/photos/tzUJHxlAZFk

Autonomous learning

- Learner takes on responsibility for learning
- Learner makes decisions about what to learn and when and how

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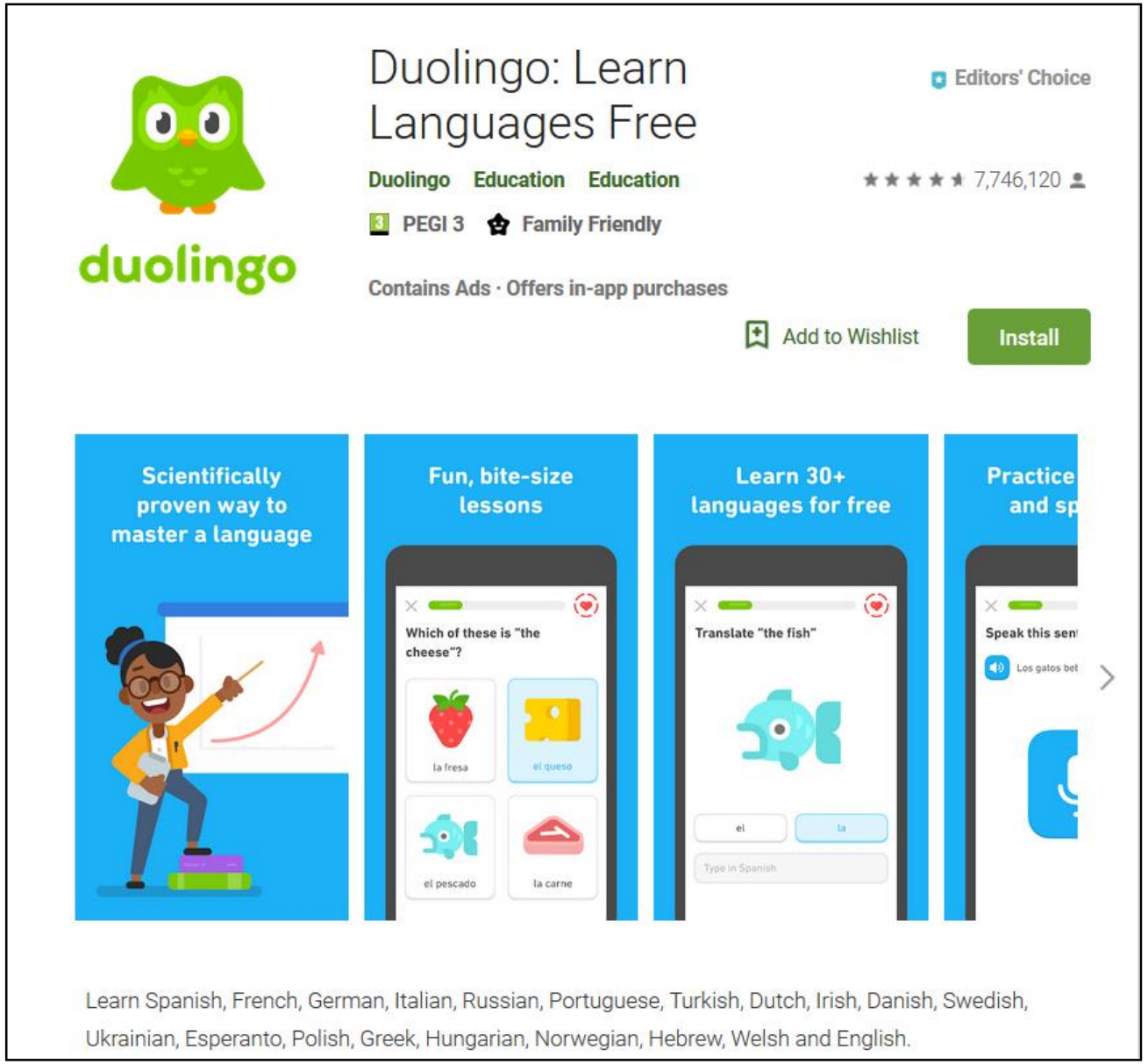
Apps


Duolingo: Learn Languages Free
Editors' Choice
Duolingo Education Education
7,746,120
PEGI 3
Family Friendly
Contains Ads · Offers in-app purchases
Add to Wishlist
Install
duolingo
Scientifically proven way to master a language
Fun, bite-size lessons
Which of these is "the cheese"?
la fresa
el queso
el pescado
la carne
Learn 30+ languages for free
Translate "the fish"
el
la
Type in Spanish
Practice and sp
Speak this sen
Los gatos bet
Learn Spanish, French, German, Italian, Russian, Portuguese, Turkish, Dutch, Irish, Danish, Swedish, Ukrainian, Esperanto, Polish, Greek, Hungarian, Norwegian, Hebrew, Welsh and English.

With more than 300 million learners, Duolingo has the world's largest collection of language-learning data at its fingertips. This allows us to build unique systems and uncover new insights about the nature of language and learning. We are committed to sharing our data and findings with the broader research community.

https://ai.duolingo.com/

Second Language Acquisition Modeling

Burr Settles* **Chris Brust*** **Erin Gustafson*** **Masato Hagiwara*** **Nitin Madnani†**
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Abstract

We present the task of *second language acquisition (SLA) modeling*. Given a history of errors made by learners of a second language, the task is to predict errors that they are likely to make at arbitrary points in the future. We describe a large corpus of more than 7M words produced by more than 6k learners of English, Spanish, and French using Duolingo, a popular online language-learning app. Then we report on the results of a "shared task" challenge organized by the authors using this SLA modeling corpus, which brought together 15 research teams. Our goal for this work is threefold: (1) to synthesize years of research in cognitive science, linguistics, and machine learning, (2) to facilitate cross-dialog among these disciplines through a common large-scale empirical task, and in so doing (3) to shed light on the most effective approaches to SLA modeling.

2 Shared Task Description

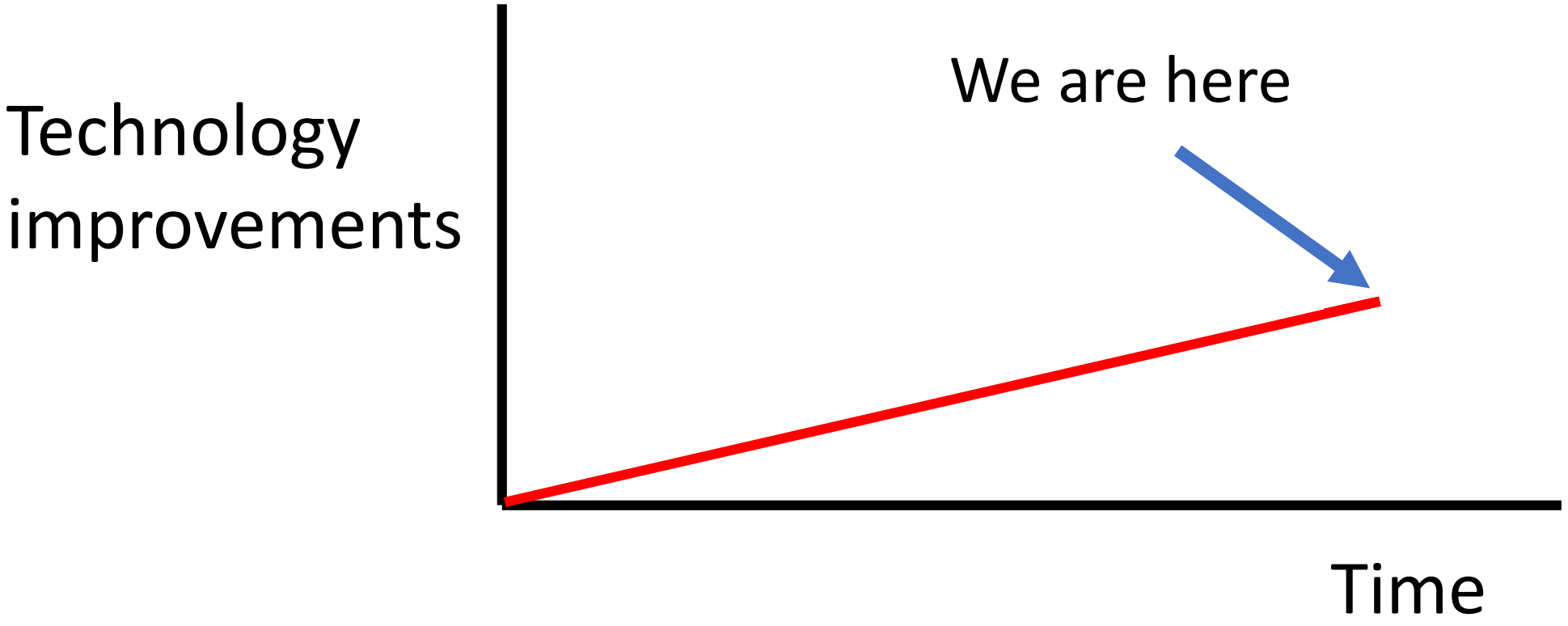
Our learner trace data comes from Duolingo: a free, award-winning, online language-learning platform. Since launching in 2012, more than 200 million learners worldwide have enrolled in

We present the task of *second language acquisition (SLA) modeling*. Given a history of errors made by learners of a second language, the task is to predict errors that they are likely to make at arbitrary points in the future. We de-

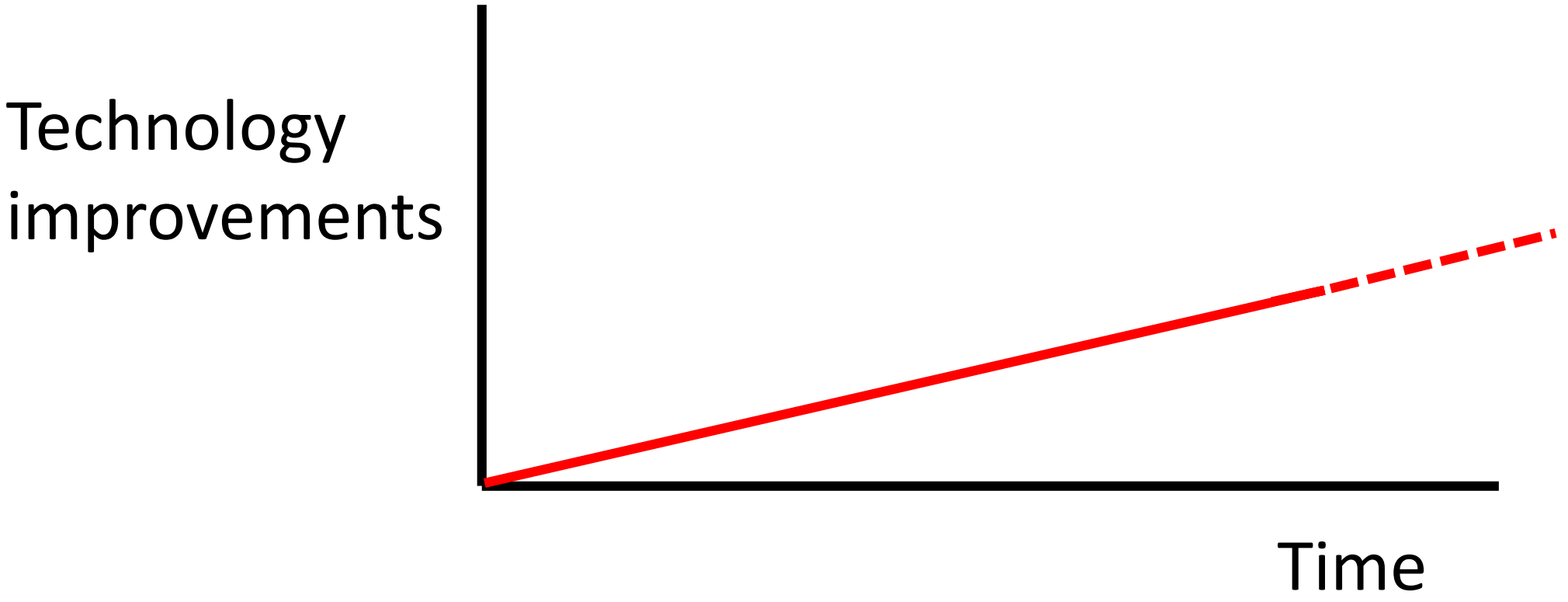
https://ai.duolingo.com/

Do we need to panic?

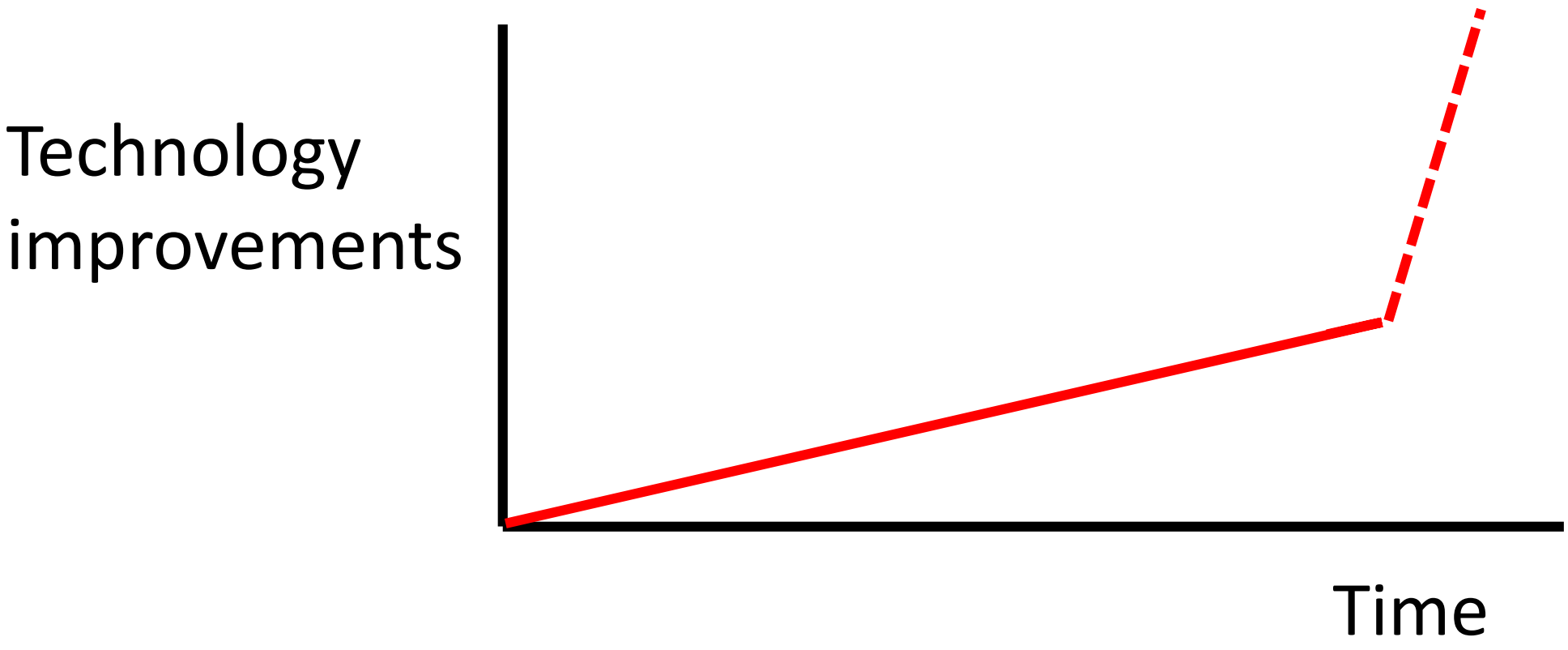
https://pixabay.com/illustrations/keyboard-button-panic-fear-anxiety-114439/


Technology improvements
We are here
Time

Is this what is going to happen?



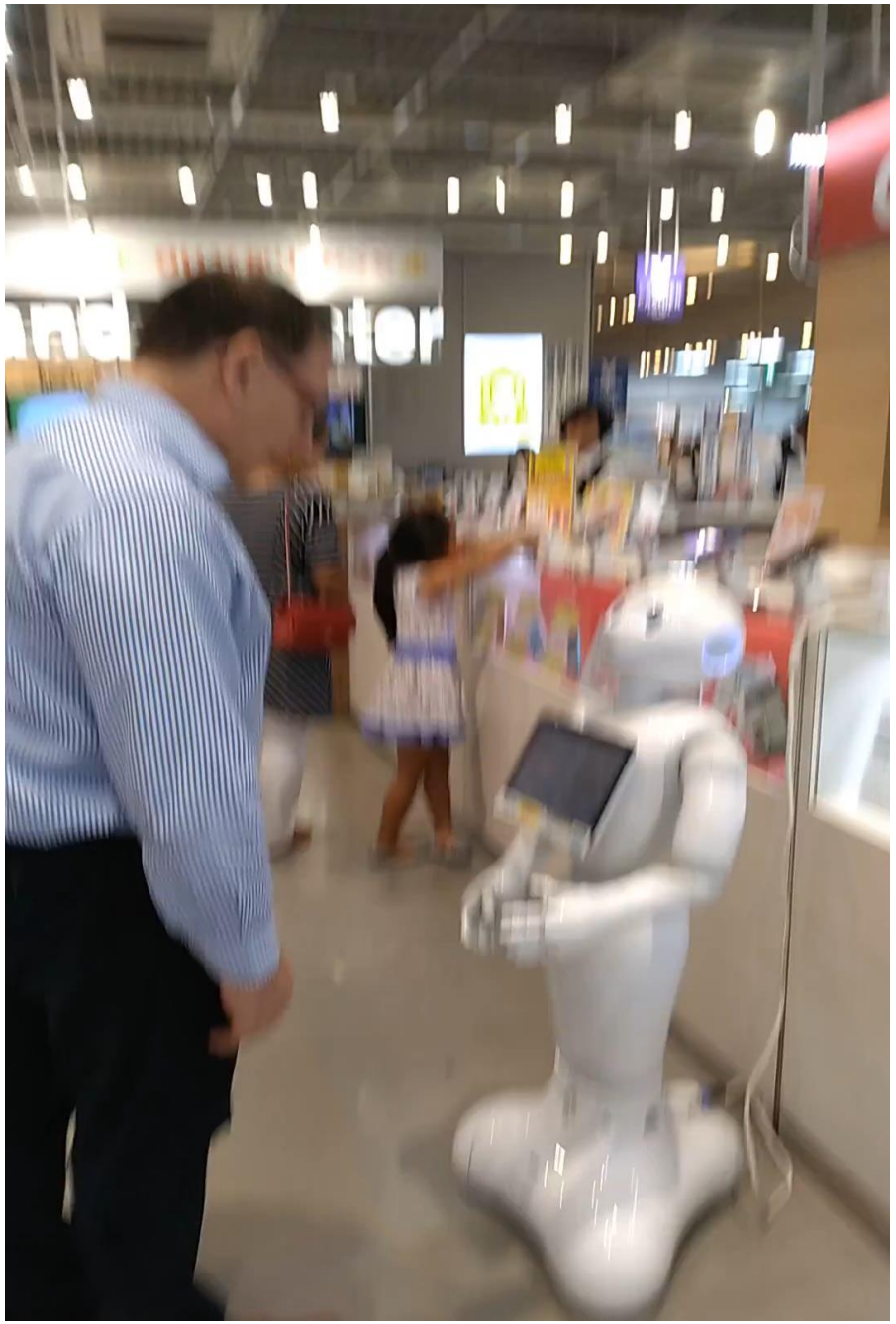
Or is this closer?



Challenge Number Four

We don‘t know how fast this sort of technology is improving

Back to Pepper



Do we need to panic?

- New focus – need to help learners use the technology
- Communication soft skills (leadership talk, impression management, team work …)

So many opportunities!

PLAN B

PLAN B

ELT it is a-changing

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www.e4b.de